

What is claimed is:

1. A noise-protecting arrangement for ear protector,
comprising:

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an audio-frequency receiving unit, which may be a
capacitormicrophone for receiving an external audio
signal;

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a first audio-frequency amplifying unit for
amplifying the audio signal received by said
audio-frequency receiving unit;

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a volume control amplifying unit for further
amplifying the audio signal having been amplified
by said first audio-frequency amplifying unit;

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a current amplifying unit for processing the audio
signal received from said volume control amplifying
unit, so that the audio signal processed, converted,
and output by said current amplifying unit is of 85dB,
which is equivalent to an audio signal of 0.6V;

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a gain control signal unit for processing the 0.6V
audio signal output from said current amplifying unit,
so that the audio signal processed, converted, and

output by said gain control signal unit is a control signal of 0V;

5 an impedance matching unit for matching the audio signal having been amplified by said first audio-frequency amplifying unit, so that said amplified audio signal is given an impedance to reduce loss of the audio signal;

10 a gain control unit, which may be a field effect transistor (FET) and is energized when the audio signal processed, converted, and output by said gain control signal unit to said gain control unit is a control signal of 0V, so that the audio signal
15 amplified by said impedance matching unit is attenuated at a gain adjusting unit and then passes through a volume regulating unit;

a volume regulating unit, which is a variable
20 resistance for regulating an intensity of the audio signal passed through said impedance matching unit and thereby controlling high and low of volume of the audio signal being output;

25 a second audio-frequency amplifying unit for amplifying the audio signal having been regulated

by said volume regulating unit; and

an audio-frequency output unit, which is a
loudspeaker, at where the audio signal received by
said audio-frequency receiving unit and processed
by said second audio-frequency amplifying unit may
be heard.

2. The noise-protecting arrangement for ear protector
as claimed in claim 1, wherein said gain control
signal unit is adapted to converts and outputs the
audio signal as a control signal of 3V when a sound
source received by said gain control signal unit is
an audio signal of less than 85dB.

3. The noise-protecting arrangement for ear protector
as claimed in claim 1, wherein said gain control unit
is not energized when the audio signal converted and
output by said gain control signal unit to said gain
control unit is a control signal of 3V, allowing the
audio signal amplified by said impedance matching
unit to directly pass through said volume regulating
unit.